

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method for achieving crypto-synchronization in a packet data communication system, the packet data communication system comprising a transmitter and a receiver, said transmitter and said receiver each having cryptographic security capabilities, comprising:

generating data frames at a predetermined rate in a transmitter;

incrementing a state vector at said predetermined rate;

providing said state vector to an encryption module;

generating a codebook from said encryption module, using at least said state vector, said codebook for encrypting at least one of said data frames;

detecting a delay in transmitting said data frames;

dropping one or more of said frames; and

disabling said state vector from incrementing for each of said data frames being dropped.

2. (Original) The method of claim 1 wherein said state vector is enabled after a desired number of said data frames have been dropped.

3. (Previously Presented) The method of claim 1 wherein said generating said data frames comprises:

converting information into digitized information;

providing said digitized information to a vocoder; and

generating said data frames by said vocoder at said predetermined rate.

4. (Previously Presented) The method of claim 1 wherein said dropping one or more of said data frames comprises dropping said data frames at a fixed, predetermined rate.

5. (Previously Presented) The method of claim 1 wherein said dropping one or more of said data frames comprises:

determining a communication channel latency; and

dropping said data frames at a variable rate in accordance with said communication channel latency.

Attorney Docket No. 990228

6. (Previously Presented) The method of claim 5 wherein said dropping said data frames at a variable rate comprises:

decreasing said rate if said communication channel latency falls below at least one predetermined threshold; and

increasing said rate if said communication channel latency exceeds at least one other predetermined threshold.

7. (Previously Presented) The method of claim 1 wherein said dropping said data frames comprises:

determining a communication channel latency;

dropping said data frames at a first predetermined fixed rate if said communication channel latency falls below a predetermined threshold; and

dropping said data frames at a second predetermined fixed rate if said communication channel latency exceeds said predetermined threshold.

8. (Previously Presented) The method of claim 1 wherein said dropping one or more of said data frames comprises:

determining a communication channel latency; and

dropping each of said data frames having an encoded rate equal to a first encoding rate if said communication channel latency exceeds a predetermined threshold.

9. (Previously Presented) The method of claim 8, further comprising dropping each of said data frames having an encoded rate equal to said first encoding rate and a second encoding rate if said communication channel latency exceeds a second predetermined threshold.

10. (Currently Amended) A method for achieving crypto-synchronization in a packet data communication system, the packet data communication system comprising a transmitter and a receiver, said transmitter and said receiver each having cryptographic security capabilities, comprising:

receiving data frames at a receiver;

storing said data frames in sequence in a queue;

providing said stored data frames, in sequence, to a decryption module;

incrementing a state vector at a predetermined rate;

providing said state vector to the decryption module;

generating a codebook from said decryption module, using at least said state vector, said codebook for decrypting at least one of said data frames;

Attorney Docket No. 990228

detecting that the data frames in the queue exceed a limit;
dropping one or more of said data frames in said queue; and
adjusting said state vector for each of said one or more data frames that are dropped.

11. (Previously Presented) The method of claim 10 wherein said adjusting said state vector comprises:

determining a number of dropped data frames; and
advancing said state vector in proportion to said number of dropped frames.

12. (Previously Presented) The method of claim 11 wherein said advancing said state vector comprises advancing said state vector by a value of one for each of said one or more dropped frames.

13. (Previously Presented) The method of claim 10 further comprising:
applying said adjusted state vector to said decryption module;
generating a second codebook derived from said adjusted state vector;
providing a sequential non-dropped frame in said queue to said decryption module; and
decrypting said sequential non-dropped frame using said second codebook.

14. (Previously Presented) The method of claim 10 wherein said dropping one or more of said data frames comprises dropping said one or more data frames at a fixed rate.

15. (Previously Presented) The method of claim 10 wherein said dropping one or more of said data frames comprises:

determining a communication channel latency; and
dropping said one or more data frames at a variable rate in accordance with said communication channel latency.

16. (Previously Presented) The method of claim 15 wherein said dropping said one or more of said data frames at a variable rate comprises:

decreasing said rate if said communication channel latency falls below at least one predetermined threshold; and

increasing said rate if said communication channel latency exceeds at least one other predetermined threshold.

Attorney Docket No. 990228

17. (Previously Presented) The method of claim 10 wherein said dropping said one or more of said data frames comprises:

determining a communication channel latency;

dropping said data frames at a first predetermined fixed rate if said communication channel latency falls below a predetermined threshold; and

dropping said data frames at a second predetermined fixed rate if said communication channel latency exceeds said predetermined threshold.

18. (Previously Presented) The method of claim 10 wherein said dropping one or more of said data frames comprises:

determining a communication channel latency; and

dropping each of said data frames having an encoded rate equal to a first encoding rate if said communication channel latency exceeds a predetermined threshold.

19. (Previously Presented) The method of claim 18, further comprising dropping one or more of said data frames having an encoded rate equal to said first encoding rate and a second encoding rate if said communication channel latency exceeds a second predetermined threshold.

20. (Currently Amended) A method for achieving crypto-synchronization in a packet data communication system, the packet data communication system comprising a transmitter and a receiver, said transmitter and said receiver each having cryptographic security capabilities, comprising:

receiving data frames at a receiver;

storing said data frames in a queue;

providing at least one of said data frames from said queue to a decryption module if available in said queue;

providing a state vector to said decryption module, said state vector incremented at a predetermined rate;

generating a codebook from said decryption module, using at least said state vector, said codebook for decrypting at least one of said data frames; and

detecting that no data frame is available in said queue for decryption; and

disabling said state vector when no data frame is available for decryption in said queue is ~~in an underflow condition~~.

21. (Previously Presented) The method of claim 20, wherein said disabling said state vector comprises:

Attorney Docket No. 990228

determining that none of said data frames are available for decryption in said queue;
disabling said state vector;
determining that at least one of said data frames is available for decryption in said queue;
enabling said state vector; and
incrementing said state vector by a value of one.

22. (Currently Amended) A transmitter for achieving crypto-synchronization in a packet data communication system, the packet data communication system comprising said transmitter and a receiver, said transmitter and said receiver each having cryptographic security capabilities, said transmitter comprising:

means for generating data frames at a predetermined rate;

means for generating a state vector, said state vector incremented at said predetermined rate;

an encryption module ~~for~~ adapted to generate a codebook from at least said state vector, said codebook for encrypting at least one of said data frames; and

a processor ~~for adapted to detect a delay in transmitting said data frames, to dropping one or more of said data frames, and to for disabling~~ adapted to detect a delay in transmitting said data frames, to dropping one or more of said data frames, and to ~~for disabling~~ said state vector for each of said data frames that are dropped.

23. (Original) The apparatus of claim 22 wherein said data frames are dropped at a fixed, predetermined rate.

24. (Original) The apparatus of claim 22 wherein said data frames are dropped at a variable rate.

25. (Previously Presented) The apparatus of claim 24, wherein:

said processor is further for determining a communication channel latency;

said data frames are dropped at a decreased rate if said communication channel latency exceeds at least one predetermined threshold; and

said data frames are dropped at an increased rate if said communication channel latency falls below at least one other predetermined threshold.

26. (Original) The apparatus of claim 22, wherein said processor is further for determining a communication channel latency, for dropping said data frames at a first fixed rate if said communication channel latency falls below a predetermined threshold, and for dropping

Attorney Docket No. 990228

said data frames at a second fixed rate if said communication channel latency exceeds said predetermined threshold.

27. (Original) The apparatus of claim 22 wherein said processor is further for determining a communication channel latency, and for dropping each of said data frames having an encoded rate equal to a first encoding rate if said communication channel latency exceeds a predetermined threshold.

28. (Original) The apparatus of claim 27, wherein said processor is further for dropping each of said data frames having an encoded rate equal to said first encoding rate and a second encoding rate if said communication channel latency exceeds a second predetermined threshold.

29. (Original) The apparatus of claim 22 wherein said means for generating data frames comprises:

a receiver for receiving a wireless communication signal; and

a demodulator for demodulating said wireless communication signal and for producing said data frames.

30. (Currently Amended) A receiver for achieving crypto-synchronization in a packet data communication system, the packet data communication system comprising a transmitter and said receiver, said transmitter and said receiver each having cryptographic security capabilities, said receiver comprising:

means for receiving data frames;

a queue ~~for adapted to storing~~ said data frames;

means for generating a state vector, said state vector incremented at a predetermined rate;

a decryption module ~~for adapted to generating~~ a codebook from at least said state vector, said codebook for decrypting at least one of said data frames; and

a processor ~~for adapted to detect a delay in decryption of said data frames, to dropping~~ one or more of said data frames in said queue, and ~~for to adjusting~~ said state vector for each of said data frames that are dropped.

31. (Original) The receiver of claim 30 wherein said processor adjusts said state vector by determining a number of dropped data frames and advancing said state vector in proportion to said number of dropped frames.

Attorney Docket No. 990228

32. (Original) The receiver of claim 31 wherein said state vector is advanced by a value of one for each of said dropped data frames.

33. (Original) The receiver of claim 30 wherein said processor drops said one or more data frames at a fixed rate.

34. (Original) The receiver of claim 30 wherein said processor is further for determining a communication channel latency and dropping said one or more data frames at a variable rate in accordance with said communication channel latency.

35. (Original) The receiver of claim 34 wherein:
said processor decreases said rate if said communication channel latency falls below at least one predetermined threshold; and
said processor increases said rate if said communication channel latency exceeds at least one other predetermined threshold.

36. (Original) The receiver of claim 30 wherein said processor is further for determining a communication channel latency; and
dropping said one or more data frames at a first predetermined fixed rate if said communication channel latency falls below a predetermined threshold; and
dropping said one or more data frames at a second predetermined fixed rate if said communication channel latency exceeds said predetermined threshold.

37. (Original) The receiver of claim 30 wherein said processor is further for determining a communication channel latency; and
dropping each of said one or more data frames having an encoded rate equal to a first encoding rate if said communication channel latency exceeds a predetermined threshold.

38. (Original) The receiver of claim 37 wherein said processor drops said one or more data frames having an encoded rate equal to said first encoding rate and a second encoding rate if said communication channel latency exceeds a second predetermined threshold.

39. (Currently Amended) A receiver for achieving crypto-synchronization in a packet data communication system, the packet data communication system comprising a transmitter and said receiver, said transmitter and said receiver each having cryptographic security capabilities, said receiver comprising:

Attorney Docket No. 990228

means for receiving ~~generating~~ data frames;
a queue ~~for adapted to storing~~ said data frames;
means for generating a state vector, said state vector incremented at a predetermined rate;
a decryption module ~~for adapted to generating~~ a codebook from at least said state vector,
said codebook for decrypting at least one of said data frames; and
a processor ~~for adapted to detect that no data frame is available in said queue for~~
~~decryption and to disabling~~ said state vector if no data frames are available to be decrypted in
said queue.

40. (Currently Amended) The receiver of claim 39 wherein said state vector is enabled when at least one data frame becomes available for endecryption in said queue.